



Kansas DOT

Rosa Equipment Contract

2010 - 2011

Qty.	Item Description	Part #	List Unit Price	KDOT Contract Unit Price
WEATHER STATION ELECTRONICS				
1	North American Guardian w/o Cell Modem RoSA Master Road Weather Station Software License Frame for RoSA Road Sensor and Atmospherics Sensors Interface Instrument Cabinet-Large Lockset & Flanges Mounting Frame, Radiation Shield and Cable Cover Processing unit with integrated dial-up modem Residual Current Circuit Breaker with Overcurrent Protection US Mains Socket Surge Protector Modem line protection for all dial-up and leased line modems apply with 115 VAC (US version)	DR11SYS4M6INNNNNNNNA RoSAMASTER DMF133 DRI521 BOX542 2*215168 BOX542SET DMC586M DRMAINS3US 218012, 218935	23,995.00	20,395.75
1	Road Weather Station RoSA Components RoSA Master Road Weather Station Software License	RoSAMASTER	141.70	120.45
1	Frame for RoSA	DMF133	407.66	346.51
1	Road Sensor Interface	DRI511	715.28	607.99
1	Road Sensor and Atmospherics Sensors Interface	DRI521	1,010.45	858.88
1	Blank Plate Cover - Large Maximum 2 per DMF133	DM45228	23.00	19.55
1	Blank Plate Cover - Small Maximum 2 per DMF133; use with DM45228 where possible	30602	23.00	19.55
1	Instrument Cabinet-Small	BOX322	309.56	263.13
1	Instrument Cabinet-Large	BOX542	374.96	318.72
1	BOX322 Mounting Frame, Radiation Shield and Cable Cover	BOX322SET	202.74	172.33
1	BOX542 Mounting Frame, Radiation Shield and Cable Cover	BOX542SET	305.20	259.42
1	Lock set for BOX322/BOX542 2 per cabinet	215168	26.16	22.24
1	Processing unit	DMC586	974.46	828.29
1	Processing unit with integrated dial-up modem Residual Current Circuit Breaker with Overcurrent Protection, US Mains Socket, Surge Protector	DMC586M DRMAINS3US	1,754.73 248.52	1,491.52 211.24
1	Phone Line surge protector Socket (DIN-Rail mounting)	218012	26.16	22.24
1	Phone Line surge protector Plug (US)	218935	89.38	75.97
Communications				
1	Verizon modem, cable, antenna and adapter in 1 kit	CellmodemVZkit	1,780.01	1,513.01
1	Alltel modem, cable, antenna and adapter in 1 kit	CellmodemALkit	1,780.01	1,513.01
1	AT&T modem, cable, antenna and adapter in 1 kit	CellmodemATkit	1,780.01	1,513.01
1	Bell Mobility modem, cable, antenna and adapter in 1 kit	CellmodemBLkit	1,780.01	1,513.01
1	Rogers Wireless (CANADA) modem, cable, antenna and adapter in 1 kit	CellmodemRGkit	1,780.01	1,513.01
1	Landline Service	Customer provided		
Power Components				
1	Power Supply - Din Rail Mounted Use whenever more than one 24V sensor, cell modem or camera	PS5RSD24	177.72	151.06

1	Cable Kit	DMC586Z1	174.40	148.24
1	For DMF133 when built in BOU			
1	Power Cord, 6'	56-22050	4.62	3.93
1	For DMF133 when built in BOU			
	RPU Solar Power Supply - Custom Configuration			
	U.L. listed PV panel array, mounting poles & bracket kit, sealed maintenance free batteries, NEMA 3R battery enclosure, voltage regulator and wiring harness.	Custom Quote Only	Custom Quote	
1	Supplemental Surge Protection			
1	Surge Module for AC Mains	2839334 / 909-0004	193.38	164.37
1	Surge Module for 24V	2839318 / 909-0218	193.38	164.37
1	Surge Module for Ethernet	2838762 / 909-0256	386.94	328.90
1	Surge Module for RS-485	2839570 / 909-0261	383.08	325.62
1	Surge Module for Telephone Line	2838733	241.80	205.53
1	Base for AC or 24V modules	2839282 / 909-0002	60.98	51.83
1	Base for RS-485 or Ethernet modules	2839208 / 909-0227	149.16	126.79
1	Base & Module for Telephone Line	2882828	336.46	285.99
1	DIN mount RH-45 Jack	5543630 / 809-0431	89.74	76.28
1	Vaisala 24VDC RS-485 Surge	WSP150	460.00	391.00
	ATMOSPHERIC & ENVIRONMENTAL SENSING DEVICES			
	Air Temp / Humidity Sensor			
1	Air Temp / Humidity Sensor, RoSA w/o Cable	HMP155D-2AB11A0A0A1A0A	964.00	819.40
1	HMP155 w/ Connection Cable 3.5m 8-pin M12	HMP155D-2AB11A0A1A1A0A	1,273.00	1,082.05
1	HMP155 w/ Connection Cable 10m 8-pin M12	HMP155D-2AB11A0A2A1A0A	1,044.00	887.40
1	HMP155 w/ Connection Cable 30m 8-pin M12	HMP155D-2AB11A0A3A1A0A	1,092.00	928.20
1	Radiation Shield	DTR503	866.99	736.94
	Use with all new installations			
1	Pressure Sensor	PTB1101B1AA	1,050.00	892.50
	BAROCAP [®] silicon capacitive absolute pressure sensor Range: 500-1100 hPa Total accuracy (-20 ... +45 °C): ±1.00 hPa			
1	Rain Detector (RAIN ON/OFF)	DRD11A	2,150.00	1,827.50
1	Precipitation / Visibility Sensors			
1	Visibility Sensor PWD10	PWD10-ANNNN1NANNNNAN	5,485.64	4,662.79
1	Precipitation / Visibility Sensor, 10-2000m	PWD12-CNNNN1NANNNNBN	7,480.64	6,358.54
1	Precipitation / Visibility Sensor W/ Hood Heaters, 10-2000m	PWD12-DNNNN1NANNNNCN	10,672.00	9,071.20
1	Precipitation / Visibility Sensor, 10-20,000m	PWD22-DNHHN1NANNNNCN	14,224.00	12,090.40
1	Precipitation / Visibility Sensor W/ Hood Heaters, 10-20,000m	PWD22-DNHHN1NANNNNCN	14,528.00	12,348.80
1	Precipitation Identifier PWD31	PWD31-PNNNN1NANNNNMN	4,918.64	4,180.84
1	Precipitation / Identifier Sensor W/ Hood Heaters PWD31	PWD31-PNHNN1NANNNNMN	7,472.00	6,351.20
1	PWD Connection Cable 3.85m (16 wires)	217150	261.60	222.36
1	PWD Connection Cable 8m (16 wires)	217147	331.36	281.66
1	PWD Connection Cable 15m (16 wires)	217148	453.44	385.42
1	PWD Connection Cable 35m (16 wires)	217149	715.04	607.78
1	Wind Sensor Kit	WM30B2CB	1,430.00	1,215.50
	Wind Sensor			
	Mounting Accessories Kit for WMS301 and 50mm-110mm Mast	WMS301		
	Cable, 10 m	WMS30KIT		
		19904		
1	Wind Sensor Components			
1	Wind Sensor	WMS301	1,238.24	1,052.50
1	Mounting Accessories Kit for WMS301 and 50mm-110mm Mast	WMS30KIT	191.84	163.06
1	Cable, 10 m	19904	209.28	177.89
1	Pyranometer radiation sensor for RoSA	DM32RAD	433.82	368.75
	Includes QMS101 Pyranometer, DM45991 Installation Plate			
1	Signal and Heating Cable 10m	REIM707651	209.28	177.89
1	Cable, 10 m	19904	209.28	177.89
1	Mounted Camera Kit, Mobotix	228698	2,455.58	2,087.24
	Mobotix 12 Camera	ICECAM_MOBM12		
	30 cable for Mobotix Camera	221361		
	4 cable for Mobotix Camera	221507		
1	Fixed Camera Components			
1	Mobotix 12 Camera	ICECAM_MOBM12	2,402.99	2,042.54
1	Mounting Assembly - Pole Mount	DRUNIV	596.85	507.32
1	Mobotix Mounting Plate - Lattice Mount	ICEMOBOTIXPLATE	47.96	40.77
1	4' cable for Mobotix Camera	221507	1.39	1.18
1	30' cable for Mobotix Camera	221361	51.21	43.53
1	50' cable for Mobotix Camera	224853	54.48	46.31
1	100' cable for Mobotix Camera	Spec100 Cable	Custom Quote	

1	130' cable for Mobotix Camera	Spec130 Cable	0.00	0.00
1	Special Length Cable for Mobotix Camera	(Specify length)	0.00	0.00
1	PTZ Camera Kit	227750	6,400.00	5,440.00
	Q6032-E Environmental Rated Outdoor PTZ Dome Camera			
	T8124 High Power Midspan (Power over Ethernet Inserter included with camera)			
	35899 IP66 rated Ethernet connector for cable (included with camera)	227721		
	T-91A61 Wall Mount Arm (also has band slots for pole mounting)	227749		
	30' Outdoor UV rated, shielded Ethernet cable with overmolded boots	221361		
	Dehn DPA M CLE RJ45B 48 DEHNpatch ethernet surge suppressor with PoE support	227782		
	0.5m Shielded Ethernet cable with overmolded boots - surge to midspan and midspan to Bluetree modem	217760		
	Mount Plate - midspan PoE inserter to DIN rail	DRW233723		
	Adapter Plate - Camera Arm to Lattice Tower - add if to be installed on lattice tower	DRW233622		
1	PTZ Camera Components			
	Q6032-E Environmental Rated Outdoor PTZ Dome Camera			
	T8124 High Power Midspan (Power over Ethernet Inserter included with camera)	227721	6,160.00	
1	35899 IP66 rated Ethernet connector for cable (included with camera)			5,236.00
1	T-91A61 Wall Mount Arm (also has band slots for pole mounting)	227749	178.42	151.65
1	30' Outdoor UV rated, shielded Ethernet cable with overmolded boots	221361	163.50	138.98
1	Dehn DPA M CLE RJ45B 48 DEHNpatch ethernet surge suppressor with PoE support	227782	261.60	222.36
1	0.5m Shielded Ethernet cable with overmolded boots - surge to midspan	217760	5.45	4.63
1	0.5m Shielded Ethernet cable with overmolded boots - midspan to Bluetree modem	217760	5.45	4.63
1	Mount Plate - midspan PoE inserter to DIN rail	DRW233723	327.00	277.95
1	Adapter Plate - Camera Arm to Lattice Tower - add if to be installed on lattice tower	DRW233622	327.00	277.95
1	Infrared Illuminator with Power Pack and Cabli	ICEIRIL08KIT	364.27	309.63
1	Mounting Assembly - Pole Mount	DRUNIV	596.85	507.32
1	Mobotix Mounting Plate - Lattice Mount	ICEMOBOTIXPLATE	47.96	40.77
1	Infrared Illuminator, Standard	IL08	235.44	200.12
1	Traffic Counter Kit	227751	7,500.00	6,375.00
	WX-SS-125 Wavetronix SmartSensor HD			
	Wavetronix 40' SmartSensor Cable	80000500		
	Wavetronix Sensor Mount Bracket	80000501		
	Click!200 Surge Module with RS-232 & RS-485 breakout	227987		
	Click!301 Ethernet to Serial module	80000504		
	0.5m Shielded Ethernet Cable with overmolded boots - Click!301 to Bluetree modem	80000508		
	RS-232 cable from Click!200 to DMC586	217760		
		DRW222954Z500MM		
1	Traffic Counter Components			
1	WX-SS-125 Wavetronix SmartSensor HD	80000500	9,810.00	8,338.50
1	Wavetronix 40' SmartSensor Cable	80000501	436.00	370.60
1	Wavetronix Sensor Mount Bracket	227987	327.00	277.95
1	Click!200 Surge Module with RS-232 & RS-485 breakout	80000504	601.68	511.43
1	Click!301 Ethernet to Serial module	80000508	1,164.12	989.50
1	0.5m Shielded Ethernet Cable with overmolded boots- Click!301 to Bluetree modem	217760	5.45	4.63
1	RS-232 cable from Click!200 to DMC586 (length & pinout?)	DRW222954Z500MM	8.72	7.41
1	Sensor Mount Kit, Lattice Tower	228699	188.92	160.58
	Sensor Support Arm 46"	212564		
	Mounting Assembly, Lattice Mount	XARMMOUNT		
1	Sensor Mounting Hardware Kit - Pole	DRUNIVARM	809.75	688.29
	Sensor Support Arm 46"	212564		
	Mounting Assembly, Pole Mount	DRUNIV		
	Fixing Plate	212489		
1	Sensor Mounting Hardware Components			
1	Sensor Support Arm 46"	212564	85.02	72.27
1	Mounting Assembly, Lattice Mount	XARMMOUNT	103.90	88.32
1	Mounting Assembly, Pole Mount	DRUNIV	596.85	507.32
1	Fixing Plate	212489	23.98	20.38
	Recommended Floor Stock			
1	Band It Bracket	221503	10.38	8.82
1	Band It Bracket lock	221504	193.67	164.62

1	Band It Strap	221505	285.27	242.48
PAVEMENT SENSORS				
1	Remote Surface State Sensor	DSC111	16,320.00	13,872.00
1	Remote Surface Temperature Sensor (RS485)	DST111	5,350.00	4,547.50
SENSOR CABLES				
1	Communication cable between DSC111 and DST111	216548	71.94	30.57
1	3 m cable for communications and power supply	26719	63.22	53.74
1	5 m cable for communications and power supply	26720	100.28	85.24
1	10 m cable for communications and power supply	216546	122.08	103.77
1	25 m cable for communications and power supply	216547	156.96	133.42
1	50 m cable for communications and power supply	DR221741Z50M	207.10	176.04
1	100 m cable for communications and power supply	DR221741Z100M	337.90	287.22
1	150 m cable for communications and power supply	DR221741Z150M	497.04	422.48
1	Special length cable for communications and power supply	DR221741ZSPEC	0.00	0.00
Embedded Surface Sensors				
1	Road surface sensor with 20 m cable	DRS511AB2	531.92	452.13
1	Road surface sensor with 30 m cable	DRS511AB3	553.72	470.66
1	Road surface sensor with 50 m cable	DRS511AB5	954.25	811.11
1	Road surface sensor with 100 m cable	DRS511AB10	677.98	576.28
1	Road surface sensor with 150 m cable	DRS511AB15	852.38	724.52
1	Road surface sensor with 200 m cable	DRS511AB20	915.60	778.26
1	Road Surface sensor with special length cable (must specify length in TS spec)	DRS511ABSPEC	1,059.48	900.56
1	Road sensor Cable 1 meter	10916	2.18	1.85
Bridge Sensors (Height 50 mm)				
1	Bridge sensor with 20 m cable	DRS511BB2	531.92	452.13
1	Bridge sensor with 30 m cable	DRS511BB3	553.72	470.66
1	Bridge sensor with 50 m cable	DRS511BB5	599.50	509.58
1	Bridge sensor with 100 m cable	DRS511BB10	706.32	600.37
1	Bridge sensor with 150 m cable	DRS511BB15	810.96	689.32
1	Bridge sensor with 200 m cable	DRS511BB20	917.78	780.11
1	Road Surface sensor with special length cable (must specify length in TS spec)	DRS511BBSPEC	1,493.30	1,269.31
1	Road sensor Cable 1 meter	10916	2.18	1.85
1	Pavement Sensor Installation Kit	228704	383.40	325.89
1	Metal Stick, Acrylic PY5 Grout - must include HAZMAT shipping charges, HAZMAT Shipping	37-20900 INSTARMAC HAZMAT		
Sensor Installation Components				
1	Metal Stick	37-20900	33.50	28.48
1	Acrylic PY5 Grout	INSTARMAC	149.90	127.41
1	HAZMAT Shipping	HAZMAT	200.00	170.00
Depth Sensors				
1	Depth Sensor with 20 M cable	DTS151UKG2	143.50	121.98
1	Depth Sensor with 30 M cable	DTS151UKG3	175.96	149.57
1	Depth Sensor with 50 M cable	DTS151UKG5	210.94	179.30
1	Depth Sensor with 100 M cable	DTS151UKG10	323.30	274.81
1	Depth Sensor with 150 M cable	DTS151UKG15	443.17	376.70
1	Depth Sensor with 200 M cable	DTS151UKG20	455.24	386.95
1	Depth Sensor with 300 M cable	DTS151UKG30	560.00	476.00
1	Depth Sensor with 350 M cable	DTS151UKG35	640.00	544.00

SENSOR TOWERS & POLES

1	Roadway Fold-Over 30' Tower Kit - MF1330	ICE30TOWER	3,277.00	2,785.45
---	--	------------	----------	----------

	24" Cross member mounting bracket			
	Tower top sectionTower fold-over assembly			
	Tower bottom section			
	Tower middle section			
	Fixed base assembly for concrete foundation			
	2 center tower mounts			
1	Anti-climb panels	ICETOWERPANELS	233.02	198.07
1	Atmospheric mounting pole	60030002	11.94	10.15
1	S-Cross members to mount RPU enclosure	60030004	82.67	70.27
1	Padlock	25010001	14.22	12.09
1	Tower grounding kit, RPU	24051114	285.45	242.63
1	Roadway Tower Relocation Kit	24051012	566.33	481.38
1	Fixed base assembly for concrete foundation	60010004	250.70	213.10
1	Tower grounding kit, RPU	24051114	285.45	242.63
1	Tower Hinged Base Assembly	60010005	480.07	408.06
1	Footing Assembly w/Anchor bolts for KM3030 tower	60010006	252.00	214.20
1	MF-1333 Tower Base	60001333	514.25	437.11
1	ANS Tower Kit	228705	8,625.82	7,331.95
	30' ANS Tilt Tower	T30-TILT-TOWER		
	ANS Tower Climbing Obstruction	ANSANTICLIMBPANELS		
	ANS Fixed Base	ANSFIXEDBASE		
	ANS Grounding Kit	ANSGROUNDINGKIT		
1	ANS Tower Components			
1	30' ANS Tilt Tower	T30-TILT-TOWER	7,117.48	6,049.86
1	ANS Tower climbing obstruction	ANSANTICLIMBPANELS	254.84	216.62
1	ANS Fixed Base	ANSFIXEDBASE	599.50	509.58
1	ANS Grounding Kit	ANSGROUNDINGKIT	654.00	555.90

SERVER HARDWARE AND SOFTWARE

Bureau Service				
1	Data Management, polling up to 5 outstations (per winter season)	ICENET	13,350.00	11,347.50
1	Data Management, polling up to 5 outstations (per full year)	ICENET12MONTH	17,430.00	14,815.50
1	Data Management per additional outstation (per winter season)	ICENETADD	740.00	629.00
Ice Net				
1	Access to IceNetDisplay for up to 5 concurrent users (per winter)	ICENETDISPLAY	10,010.00	8,508.50
1	Access to IceNetDisplay for up to 5 concurrent users (per year)	ICENETDISPLAY12M	12,960.00	11,016.00
1	Access to IceNetDisplay per additional concurrent user (per winter)	ICENETDISPLAYADD	1,000.00	850.00
1	24hr Forecast per outstation (requires external automated parameters)	ICENETFORECAST	2,592.00	2,203.20
1	3hr NowCast per outstation	ICENETNOWCASR	2,016.00	1,713.60
1	Forecast accuracy reports per station	FORECASTACCURACY	590.00	501.50
1	System monitoring per station	SENSORMONITORING	740.00	629.00
1	IceView Remote per user	ICENETVIEWREMOTE	2,080.00	1,768.00
1	IceNetAlarm per user	ICENETALARM	2,080.00	1,768.00
Observer				
1	Access to Observer for up to 5 concurrent users (6mths)	OBSERVER6M	7,910.00	6,723.50
1	Access to Observer for up to 5 concurrent users (12mths)	OBSERVER12M	12,960.00	11,016.00
1	Access to Observer per additional concurrent user	OBSERVERADD	790.00	671.50
Advisor				
1	Access to Advisor for up to 5 concurrent users (12mths)	ADVISOR12M	6,480.00	5,508.00
1	Access to Advisor per additional concurrent user	ADVISORADD	662.00	562.70
IceMan				
1	6 to 10 routes / 1 to 5 simultaneous users	ICEMAN5-5	12,479.04	10,607.18
1	11 to 20 routes / 1 to 5 simultaneous users	ICEMAN10-5	13,900.00	11,815.00
1	21 to 30 routes / 1 to 5 simultaneous users	ICEMAN20-5	16,640.00	14,144.00
1	31 to 40 routes / 1 to 5 simultaneous users	ICEMAN30-5	19,470.00	16,549.50
1	41 to 50 routes / 1 to 5 simultaneous users	ICEMAN40-5	22,250.00	18,912.50
1	51 to 60 routes / 1 to 5 simultaneous users	ICEMAN50-5	25,030.00	21,275.50

1	1 to 5 routes / 6 to 10 simultaneous users		12,672.00	10,771.20
1	6 to 10 routes / 6 to 10 simultaneous users	ICEMAN5-10	13,350.00	11,347.50
1	11 to 20 routes / 6 to 10 simultaneous users	ICEMAN10-10	16,130.00	13,710.50
1	21 to 30 routes / 6 to 10 simultaneous users	ICEMAN20-10	18,880.00	16,048.00
1	31 to 40 routes / 6 to 10 simultaneous users	ICEMAN30-10	21,690.00	18,436.50
1	41 to 50 routes / 6 to 10 simultaneous users	ICEMAN40-10	24,470.00	20,799.50
1	51 to 60 routes / 6 to 10 simultaneous users	ICEMAN50-10	27,250.00	23,162.50
1	1 to 5 routes / 11 to 15 simultaneous users		13,900.00	11,815.00
1	6 to 10 routes / 11 to 15 simultaneous users	ICEMAN5-15	15,570.00	13,234.50
1	11 to 20 routes / 11 to 15 simultaneous users	ICEMAN10-15	18,350.00	15,597.50
1	21 to 30 routes / 11 to 15 simultaneous users	ICEMAN20-15	21,140.00	17,969.00
1	31 to 40 routes / 11 to 15 simultaneous users	ICEMAN30-15	23,920.00	20,332.00
1	41 to 50 routes / 11 to 15 simultaneous users	ICEMAN40-15	26,700.00	22,695.00
1	51 to 60 routes / 11 to 15 simultaneous users	ICEMAN50-15	29,480.00	25,058.00

Island System Components

Small IceCast Appliance

1	Starter System polling up to 5 outstations on a single line	ICECASTSMALL	12,310.00	10,463.50
1	Licence price per additional outstation	ICECASTADD	2,080.00	1,768.00
1	Iceview 5 local	ICEVIEW5LOCAL	4,710.00	4,003.50
1	IceAlarm 5	ICEALARM	2,600.00	2,210.00

IceCast Local

1	Starter System polling up to 5 outstations	ICECASTLOCAL	12,530.00	10,650.50
1	Licence price per additional outstation	ICECASTADD	2,080.00	1,768.00
1	IceView5 launched through a web browser	ICECASTREMOTE	5,280.00	4,488.00
1	Data transfer from IceNet (BIR) to local database	PGICEUPDATE	1,630.00	1,385.50
1	Data export to XML file	ICEEXPORT	1,930.00	1,640.50
1	Data export to CSV file - very simplistic and not configurable	CSVEXPORT	1,230.00	1,045.50
1	IceAlarm 5	ICEALARM	2,600.00	2,210.00

IceCast NTCIP

1	Starter System polling up to 5 outstations	ICECASTNTCIP	12,530.00	10,650.50
1	Licence price per additional outstation	NTCIPADD	2,080.00	1,768.00

jForecaster

1	Forecaster software for forecasting agency to enter atmos data	JFORECASTER	6,270.00	5,329.50
---	--	-------------	----------	----------

jModelRun

1	For NowCast generation only: Purchase cost (upto 3 forecast sites)	MODELRUNNOWCAST	20,210.00	17,178.50
1	Cost/additional forecast site	MODELRUN3HADD	2,030.00	1,725.50
1	For 24 h Forecast generation only: Purchase cost (upto 3 forecast sites)	MODELRUNFORECAST	30,310.00	25,763.50
1	Cost/additional forecast site	MODELRUN24HADD	2,030.00	1,725.50

MESO conversion software

1	Server software to convert ASCII data to XML	VAO2XML	2,270.00	1,929.50
---	--	---------	----------	----------

Protocol support Software licence

1	NTCIP (NA)		720.00	612.00
---	------------	--	--------	--------

INSTALLATION SERVICES

1	System Turnkey Installation by VAISALA Subc	80400300	Custom Per Project
1	Surface Sensor Overlay Installation by VAISAI	80400350	Custom Per Project

SERVICE / PREVENTATIVE MAINTENANCE CONTRACTS & ENGINEERING

1	Commissioning / Site Acceptance Commissioning is performed by VAISALA Field Service Engineer on site after installation has been completed. It is the process that brings the installed RWIS equipment into a fully operational condition. The VAISALA Field Engineer will calibrate and terminate the pavement sensor cables. The completion of commissioning signifies the start of warranty period. Duration: X work days on-site and Y travel days. Travel costs except airfare are included; airfare billed at cost.	SAT	1,912.00	1,625.20
1	Service Day at Site Annual Maintenance, Project management or Software work, Preparation of installation plan and statement of work (SOW). Engineer, specialist per Day. Duration: X work days on-site and Y travel days. Includes travel costs except airfare; airfare billed at cost.	SERVDAY	1,912.00	1,625.20
1	Service/Maintenance Work Repair at Factory, Calibration, Field Service Work, etc., Total per hour.	SERVHOUR	164.00	139.40
1	Training Day at Site Training on-site, at customer's facilities. Adequate training equipment and facilities as specified by Vaisala are furnished by the Buyer. Training fee covers one set of printed course material. Duration: X work days on-site and Y travel days. Includes travel costs except airfare; airfare billed at cost.	TRAINSITE	1,912.00	1,625.20
1	Training Day at Factory Training at Vaisala's facilities. Duration: X days Training fee covers: Set of printed course material, lunch during working days, transportation between hotel and factory for two participants. Air fare, local hotel accommodation and daily allowance are excluded Following IceCast/ROSA training courses are available: * ROSA Maintenance and operator training, typical duration 2 working days. * IceCast operator training, typical duration 1 working day. * IceCast System Managers Training, typical duration 2 working days.	TRAINFACT	1,312.00	1,115.20
1	System User Training, 4 Hour Session, Webinar Includes RWIS System and Navigator User training	90300570	1,000.00	850.00
1	Navigator Admin & Configuration Training-Webinar	90300571	1,000.00	850.00

MANUALS

1	LX Technical Manual Includes one printed copy and on copy on CD	00000005	300.00	255.00
1	Airport System Installation Manual	00000001	30.00	25.50
1	Roadway System Installation Manual	00000002	30.00	25.50
1	Sensor/Sub Probe Installation/Splice Manual	00000003	30.00	25.50
1	Outpost Installation/Operation Manual	00001800	30.00	25.50
1	RoSA Manual	TBD	300.00	255.00